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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/654,643	CHAU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Emmanuel Bayard	2611	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication filed on 1/12/07.
2. ☒ The allowed claim(s) is/are 1-29.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
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### DETAILED ACTION

This is in response to communication filed on 1/11/07 in which claims 1-29 are pending. The applicant's amendments have been fully considered therefore this case is in condition for allowance. In addition the pending claims have been renumbered as 1-12, 24, 13, 25, 14-17, 26-29 and 18-23 respectively.

#### *Allowable Subject Matter*

1. The following is an examiner's statement of reasons for allowance: the prior arts of record fails to anticipate or render obvious the following recited features: a driver circuit affixed to the first printed circuit board and coupled to the conductive path to output onto the conductive path a signal having a voltage level that varies in time between at least three distinct levels representative of at least three distinct digital values, the driver circuit including an equalization circuit to adjust the voltage level of the signal output by the driver circuit at a first time according to a digital value represented by the signal at a previous time; and a receiver circuit affixed to the first printed circuit board and coupled to receive the signal from the conductive path to determine which of the at least three distinct digital values is represented by the signal at a given time as recited in claim 1. An equalization mechanism containing an auxiliary driver adapted to receive said plurality of binary input signals and to generate an equalization signal, said equalization signal being combined with the main signal to form an output signal in which a respective transition between two different signal levels is overdriven by an amount depending on the two different signal levels as recited in claim 12. An equalization mechanism Containing an auxiliary driver that is substantially proportional

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to said main driver, said equalization mechanism adapted to receive said plurality of binary input signals and generate a set of at least three equalization signals based on said plurality of binary input signals; wherein for each of said signal levels, an activation level of said main driver and an activation level of said auxiliary driver sum to equal  $N$  as recited in claim 13. An equalization mechanism containing an auxiliary driver that is substantially proportional to said main driver, said equalization mechanism adapted to receive said plurality of binary input signals and generate a set of at least three equalization signals based on said plurality of binary input signals; wherein said equalization mechanism includes an element adapted to delay said input signals by a time substantially equal to a bit period as recited in claim 15. Said signal levels by a transition having  $N-1$  possible values for each said first signal level, said transition being substantially equal to a multiple of a difference between adjacent signal levels, said signal levels representing a set of logical states an equalization mechanism including a first auxiliary driver having a gain that is substantially proportional to and smaller than said first main driver, said equalization mechanism configured to receive said first plurality of input signals and to output on said second line a third signal, whereby said third signal compensates for crosstalk on said second line generated by said first signal as recited in claim 20.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571 272 2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Emmanuel Bayard  
Primary Examiner  
Art Unit 2611

3/14/07

**EMMANUEL BAYARD**  
**PRIMARY EXAMINER**